GOVERNMENT OF THE
CENTRAL PROVINCES AND BERAR

REPORT

ON THE WORKING OF THE

DEPARTMENT OF INDUSTRIES

IN THE

CENTRAL PROVINCES & BERAR

FOR THE YEAR ENDING

31ST MARCH 1939

GOVERNMENT PRINTING, C. P. & BERAR
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REPORT ON THE WORKING OF THE DEPARTMENT OF INDUSTRIES, CENTRAL PROVINCES AND BERAR, FOR THE YEAR ENDING 31ST MARCH 1939

[The figures in brackets refer to previous year ending the 31st March 1938.]

GENERAL

On account of provincial autonomy which has stimulated considerable interest in the nation-building departments, there was remarkable increase in the activities of all the departments of which the Director of Industries is in charge.

2. **Direction.**—My predecessor, Mr. C. C. Desai, I.C.S., continued to hold the combined charge of the Department of Industries and Co-operative Societies, throughout the year. He also continued to be the Registrar of Trade Unions, Registrar of Joint-Stock Companies, Registrar of Firms and a nominated member of the two Railway Local Advisory Committees and several other bodies. I assumed charge of the Department on the 29th April 1939.

Government sanctioned the creation of a post of the Deputy Director of Industries, Central Provinces and Berar, on the scale of Rs. 400—25—600—50—800 per mensem to which Mr. C. L. Gupta was appointed from the 22nd August 1938. As Mr. (now Rai Saheb) P. K. Sen, who was doing the work of Labour Officer in addition to his duties as an Inspector of Factories, remained fully occupied with the duties of the Labour Officer, a temporary post of an Inspector of Factories was sanctioned from the 1st January 1938 to carry on the routine inspection work and Mr. V. R. Rege was appointed to it. The creation of a Labour Office was sanctioned by Government from the 1st April 1938 to deal with questions affecting labour which have of late assumed considerable importance. To cope with the increasing work of factory inspection due to the extension of the Unregulated Factories Act to the districts of Nagpur, Bhandara, Jubbulpore and Bilaspur, the post of an additional Inspector of Factories was sanctioned on the scale of Rs. 150—10—400 and Mr. A. P. Verkhedkar was appointed to it.

3. **Board of Industries.**—During the year one meeting of the Board of Industries was held which discussed various important schemes of the Department.

4. **Railway Local Advisory Committees.**—The Local Advisory Committees of the Great Indian Peninsula and Bengal-Nagpur Railways held three and one meetings, respectively, during the year, and my predecessor attended all the meetings.

5. **Indian Boilers Act.**—A separate report published triennially by the Chief Inspector of Boilers deals fully with the subject. The total number of boilers inspected during the year was 982 [1,051] of which 7 [10] were new boilers imported direct into the province and 15 [10] were transferred from other provinces, 3 [4] boilers met with accidents, none of which, however, resulted in any loss of life or injury to attendants in charge. One prosecution was instituted under the Act, which resulted in conviction and imposition of a fine.

6. **Factories Act.**—The annual report of the Chief Inspector of Factories, Central Provinces and Berar, deals separately with this subject. The number of factories subject to the Factories Act, 1934, was 1,089 [1,059] the increase being mainly in rice mills. The Inspectors continued to bring to the notice of the injured operatives and their dependants the provisions of the Workmen's Compensation Act. The total number of accidents was 841 [601] and the compensation paid to the injured persons was Rs. 6,157 [Rs. 2,802]. Payment aggregating Rs. 10,493-8-9 [Rs. 8,753] was made to 645 [535] women under the Central Provinces Maternity Benefit Act, 1930. No epidemic was reported during the year in any industrial areas in the province. A general increase in wage level was noticed which may be attributed to implementing by the textile mills of the recommendations of the Textile Labour Enquiry Committee.

INDIAN ELECTRICITY ACT

7. **General.**—Electricity is now available at (1) Nagpur, (2) Khandwa, (3) Saugor, (4) Burhanpur, (5) Raipur, (6) Hinganghat, (7) Akola, (8) Wardha, (9) Amraoti, (10) Jubbulpore, (11) Khamgaon, (12) Chanda, (13) Yeotmal, (14) Bilaspur, (15) Katni, (16) Gondia, (17) Chhindwara, (18) Harda, (19) Arvi, (20) Karanja, (21) Akot, (22) Seoni, and (23) Kamptee Cantonment. The

total capital invested in public supply undertakings is about Rs. 96 lakhs [90 lakhs]. The capacity of generating plant installed in licensed undertakings and in factories is 36,494 [36,258] kilowatts. The use of electricity for industrial purposes is steadily increasing and there are now 2,658 [2,282] motors in use totalling 33,870 [33,606] B. H. P. In order to develop industries and to make electricity popular and within the reach of poorer classes, all the electric supply companies have been advised to reduce their rates for power and industrial purposes.

The supply of electrical energy was commenced at Akot, Karanja and Seoni during the year. The power house of the Seoni Electric Supply Company was opened by the Hon'ble the Minister for Finance. The licence for the supply of electrical energy at Shegaon was granted to Mr. Valji Ladha of Shegaon and the licence for Itarsi was granted in the joint names of Mr. N. S. Padbidri and Mr. K. S. Guzdar. The construction work at Malkapur is nearing completion.

An application for electrification of Betul was submitted to Government but was later withdrawn by the firm on account of the prevailing high prices of machinery and materials. The application of Messrs. Daroowala and Company, for the electrification of Bhandara has been kept pending as Government is not satisfied about the ability of the Municipal Committee, Bhandara, to pay for the cost of pumping. An application for the electrification of Kamptee has been submitted to Government for sanction. Schemes for the electrification of the towns of Murtizapur, Damoh, Drug, Pusad, Ellichpur City and Camp, Wun, Dhamtari and Pulgaon are in progress and the municipal committees concerned have passed resolutions agreeing to use electricity for street lighting. Sanction granted to Pench Valley Electric Supply Company, Limited, for supply of electrical energy to certain collieries and railway stations is in operation but the supply at present is only given to collieries managed by Messrs. Shaw Wallace and Company. The company intends applying for an extension of the period of sanction in order to supply energy to other collieries and railway stations in that area.

8. The Nagpur Electric Light and Power Company, Limited, has reduced the rate for electric energy for lighting and fans to Re. 0-4-0 per unit from the 20th January 1939. It has also reduced the rate for power purposes, *i.e.*, for motors under 5 B. H. P. used in flour mills.

cinemas, workshops, printing presses and refrigerators. The meter rent has been reduced to Re. 0-6-0. The Electric Power House, Khandwa, has reduced the rate for electric energy for lighting and fans to the Lady Butler Hospital at Khandwa from Re. 0-6-0 to Re. 0-4-0 per unit from the 1st January 1939, and is considering doing the same to the general public also. The Wardha Electric Supply Works has reduced the rate for electric energy for lights and fans to Re. 0-6-0 a unit from the 1st September 1938, in spite of financial difficulties. The Amraoti Electric Supply Company has reduced meter rent and the rates for power and other purposes to some extent from the 1st January 1939, and has decided to reduce the rate for electric energy for lights and fans to Re. 0-6-0 a unit from the 1st June 1939. The Jubbulpore Electric Supply Company has reduced rates for lights and fans to Re. 0-4-9 from the 1st August 1938 and the meter rent to Re. 0-6-0 from the 1st May 1938. The rate for industrial power and other purposes have also been reduced to secure the goodwill of consumers. The Saugor Electric Supply Company has reduced the rate for electric energy for lights and fans to Re. 0-6-0 per unit from the 1st July 1938 and the meter rent to Re. 0-7-0 from the 1st May 1938. The rates for power purposes have also been reduced during the year which has helped the company to build up a day load by inducing some of the agriculturists to use the energy for pumping water. The Burhanpur Electric Supply Company has reduced the rate for power-looms to Re. 0-1-6 per unit from the 1st November 1938 on account of which the number of power-looms which is more than 400 already, is further increasing. The company has been asked to instal a new generating plant of bigger capacity to meet the increasing demand. The Raipur Municipal Committee which is running the electric undertaking has been advised to dispose of the concern to a commercial firm as it is not showing any profit. The Khamgaon Electric Supply Company intended to increase power rate and it was pointed out that such increase will not be in the interests of the company in the long run. The Chanda Electric Supply Company reduced the rate for motive power to Re. 0-0-9 under special conditions with a minimum guarantee. The Yeotmal Electric Supply Company agreed to reduce the meter rent to Re. 0-7-0 from the 1st April 1939. The Electric Supply Company, Katni, has reduced rates for power purposes and the question of reducing rates for lights and

fans is under consideration. The Gondia Electric Supply Company is being persuaded to reduce the rate for lights and fans to Re. 0-6-0. It would thus be clear that the policy of inducing the electric companies to cheapen the cost of electricity was steadfastly followed during the year.

(*a*) *X-Ray.*—Modern and up-to-date X-Ray apparatus has been installed at the Mayo Hospital, Nagpur, under the direct supervision of the Electrical Adviser to Government. X-Ray is now installed in the hospitals at Nagpur, Jubbulpore, Amraoti, Buldana, Khandwa, Raipur, Akola, Wardha, Chanda, Bilaspur and Saugor. The installations are inspected from time to time for which purpose the post of a wireman has been sanctioned from the 1st April 1939.

(*b*) *Laboratory and test room.*—One electric blower suitable for 220/230 volts A.C./D.C. has been purchased for the test room. The fees received for tests and inspections amounted to Rs. 23,689 [Rs. 7,410], the increase being due to the new schedule of fees introduced by the Provincial Government from the 1st April 1938.

(*c*) *Cinema installations* :—There are 54 [49] permanent and 33 [27] temporary cinemas which were inspected from time to time to enforce compliance with the Cinema Rules. The Cinema Rules have been revised and brought into force from the 1st January 1939.

(*d*) *Accidents.*—Seven [9] accidents occurred during the year, of which none was fatal. A prosecution for infringement of rule 42 and section 33 (1) of the Act was recommended against one of the supply companies but on the assurance given by the company it was withdrawn. The manager of another company was prosecuted for infringement of rule 28 of the Indian Electricity Rules, 1937, and was fined Rs. 40.

(*e*) *Statutory inspections.*—The installations of high and medium pressure were inspected twice and low pressure installations once during the year. The rules were generally complied with. Over 508 [466] miles of aerial lines together with all connected service lines have been inspected.

INDUSTRIAL EDUCATION

9. **Industrial Schools.**—The number of Government and Government aided industrial schools in the province was three and eight, respectively, including the Basketry

School opened last year at Deori in the Bhandara district to train the aborigines. Two cottage industries institutes, one at Jubbulpore and the other at Akola, were started on an experimental basis during the period under report. These institutes have made a good start, and it is expected that eventually they will have to be permanently established. The proposal for opening an Urdu industrial school at Darwha and a municipal industrial School at Khandwa were taken up and these two new schools will start working from June 1939. Scholarships to pupils continued at a uniform rate of Rs. 6 per mensem. The total number of pupils in all the schools at the beginning of the year was 487 [468]. The number admitted to and passed out of the schools was 285 [200] and 145 [142], respectively. At the end of the year, the number of students in the schools was 589 [506] exclusive of those who left the course or were discharged for unsatisfactory progress. Of the students that passed 97 [77] were carpenters, 37 [53] smiths and 11 [12] tailors. The progressive total of students passed out was 1,486 [1,389] carpenters, 823 [786] smiths and 55 [44] tailors. The expenditure of the Department on scholarships during the year was Rs. 36,688 [Rs. 34,227]. Thanks of Government are due to Missions and local bodies which are managing the aided industrial schools.

10. **Mochi Class at Nagpur.**—The number of pupils at the beginning of the year was 16 [20]. The number admitted was 5 [9] and passed out 4 [5] leaving 17 [16] pupils at the end of the year of whom 15 [14] were Government scholars, and two Mission scholars.

11. **Reformatory School, Jubbulpore.**—Last year warders were replaced by supervisors selected from school masters. By virtue of their training and experience in dealing with boys, these supervisors have been able to effect considerable improvements in the mental and moral reformation of the inmates. A persian wheel is being manufactured for drawing water from the well and it is hoped that it would give sufficient water for irrigation purposes of the school. Arrangements are also being made to secure a gramophone which will be played in the morning. This will assist the boys in physical drill and marching which they have to do daily. The number of boys in the beginning of the year was 132 [120]. During the year, 39 [47] were admitted, 17 [35] were released and one died, leaving 153 [132] boys at the end of the year. Sixty-five

[56] boys were taught carpentry, 31 [26] tailoring, 35 [18] gardening, 10 were taught cane work and basketry in the Cottage Industries Institute and 12 being of tender age were kept on light work. In the trades examination held by the Inspector of Industrial Schools, 54 [40] passed out of 54 [47]. One hundred and thirty-three [93] boys appeared for the examination in literary subjects and 98 [74] passed. The health of the boys was good.

12. **Training of students at the All-India Village Industries School, Wardha.**—The All-India Village Industries Association maintains a village industries school at Maganwadi, Wardha, in which training is given in paper-making, oil-pressing, date palm gur-making and bee-keeping in a combined course of 10 months. Twelve pupils selected by the Department were deputed to the school for training in the above industries with effect from 1st May 1938, and a grant-in-aid of Rs. 1,800 (at Rs. 150 per pupil) was sanctioned by Government. The Association provides for the training, boarding and lodging of pupils. Out of the 12 pupils selected, only 10 joined the school of whom six passed, one failed and the remaining three were either turned out for unsatisfactory conduct or left the school. So far as is known two are doing ghani work in the province and one outside the province and one is conducting a bee-keeping class.

13. **Industrial and Technical Scholarships in institutions outside the province.**—Two scholarships of the value of Rs. 50 per mensem each, tenable for two years, at the Indian Institute of Science, Bangalore, were awarded to Mr. Nanak Singh Saigal, B.Sc., in Organic Chemistry from the 2nd July 1938 and to Mr. N. C. Ray, M.Sc., in Electrical Technology from the 8th August 1938. One scholarship of the value of Rs. 40 per mensem tenable for three years at the Indian School of Mines, Dhanbad, was awarded to Mr. W. K. Shrowty for the study of coal mining from the 2nd November 1938. Four scholarships of the value of Rs. 35 per mensem each tenable at the Victoria Jubilee Technical Institute, Bombay, were awarded during the year, *viz.*, three for textile industries and one for mechnical engineering.

Six scholarships at Rs. 25 per mensem each, for a period of six months, were awarded to selected scholars to undergo training in umbrella making at the Industrial Research Laboratory of the Government of Bengal, Calcutta.

COTTAGE INDUSTRIES

14. **Textile Branch.**—The Textile Expert was in charge of this branch throughout the year. One rearer reeler and two fieldmen were appointed for the work in connection with the schemes for the development of sericulture and tassar silk industries, respectively, in addition to the usual sanctioned staff of one weaving superintendent, two weaving teachers, one dyeing and printing demonstrator, two power-loom teachers, one weaving foreman and 16 cotton weavers :—

(*a*) *Hand-loom Industry.*—The peripatetic weaving staff consisting of weaving teachers and cotton weavers visited 188 [172] centres in the districts of Nagpur, Chand, Bhandara, Balaghat, Raipur, Bilaspur, Drug, Hoshangabad, Saugor, Nimar and Yeotmal, and introduced 304 [383] fly shuttle sleys and 51 [102] dobbies. The progressive total of the improved appliances introduced is 19,364 [19,060] sleys and 3,109 [3,058] dobbies. Besides the introduction of the aforesaid appliances supplied through the departmental agency, the demonstration parties fitted 42 [88] fly shuttle sleys and 101 [73] dobbies locally purchased by the weavers, who were also assisted by the staff in repairing their looms, supplying them with accessories and designs and in the manufacture of cloth to suit modern tastes. Fifty-six [62] fly shuttle sleys and 8 [22] dobbies were introduced among the Kosa weavers of Bilaspur district, raising the total number of such sleys and dobbies to 699 [643] and 30 [22], respectively. Owing to the good workmanship of the departmental appliances, a number of orders for improved fly shuttle sleys and dobbies were received from outside the province.

(*b*) *Experiments*—(i) *Experimental weaving shed.*—Experiments in weaving artistic varieties in curtains, purdahs, bed-spreads, curtain nettings, upholstery materials, durries, carpets, shirting and coating, etc., were continued at the Government experimental weaving shed. The above varieties were also manufactured on a large scale out of the hand spun yarn and hand reeled silk certified by the All-India Spinners Association. The articles manufactured at the weaving shed are gaining increased popularity and a large number of orders are received from outside the province and abroad. The total sale of cloth woven at the weaving shed amounted to Rs. 2,869 [Rs. 2,167] besides the cloth which was manufactured at

the weaving shed but was supplied through the Central Provinces and Berar Weavers' Co-operative Society. Special orders placed by the Government departments and private persons were executed by the society under the supervision of the staff of the textile section and the value of such orders executed by the society amounted to Rs. 3,225. Experiments were also conducted in the manufacture of Banarasi type of sarees with locally prepared Jacquards with successful results.

(ii) *Sericulture.*—Experiments in sericultural industry were continued at Nagpur with favourable results. The Provincial Government had sanctioned a sum of Rs. 5,000 for the purpose. Five demonstration centres were opened at Nagpur, Seoni, Pendra Road, Betul and Saugor. Mulberry trees were planted at the first four stations. Plantation at Saugor could not be taken up owing to the difficulty in getting a suitable land in time. The work of demonstration in silk-worm rearing and seed distribution will be started next year when sufficient supply of leaves for silk-worm rearing would be available. Mulberry was also planted on three other demonstration farms of the Agricultural Department and demonstrations in silk-worm rearing were given in five other places where people showed great interest in this industry. A good quality of cacoons was produced at the Nagpur centre and from the silk reeled therefrom, shirting, coating and handkerchiefs were manufactured in the experimental weaving shed.

(iii) *Tassar.*—From the contribution of Rs. 2,000 from the Government of India for the improvement of tassar silk industry of this province, a research and seed distribution station was opened at Armori in the Chanda district for the production and distribution of disease-free tassar silk-worm eggs. With a view to improve the quality and yield of the silk produced in the province, eggs produced from previous year's brood were distributed to rearers in the Bhandara and Chanda districts. Some quantity of eggs was also ordered from Chaibasa for distribution but the arrangement of getting eggs from outside the province was found to be uneconomical and unsatisfactory. Production of tassar silk of good quality on a large scale is the main need of this province. A departmental man was therefore sent to Chaibasa to purchase good quality of tassar seed cacoons for distribution to rearers. Over 12,500 seed cacoons from the quantity

obtained from Chaibasa were distributed to 39 rearers of eight villages in the Chanda district and rearing of silk-worms produced therefrom was done under the supervision of the departmental fieldmen. The yield from the rearing of worms of the above seed has been much superior in quality and quantity and the rearers got more than double the price as compared with what they got for cacoons of indigenous variety. Besides, rearing of tassar silk-worms obtained from 2,000 cacoons was done departmentally in a leased forest. Seed cacoons from this rearing and those of good quality purchased from the rearers have been preserved for the production and distribution of seed to rearers in the next year.

(iv) *Wool.*—Experiments to spin better quality of yarn on a treadle wool spinning machine and weaving of woollen blankets, carpets etc., from local wool were conducted and demonstrations in these were given at the exhibitions. Experiments in softening the wool and milling of blankets were also conducted during the year.

(v) *Utilization of linseed fibre.*—Experiments in utilizing fibre extracted from the linseed stalk were made and articles such as twine, ropes, door mats (carpets) were prepared at the weaving shed. Curtains and coating cloth were also woven from the yarn spun in Model Mills from cottonised linseed fibre mixed with cotton. Extraction and utilization of fibre from linseed stalks, which is a waste at present, would afford a good subsidiary industry to people in villages.

(c) *Dyeing and Printing.*—The Dyeing and Printing Demonstrator and his assistants continued to give demonstration in the modern methods of dyeing and printing and visited 24 [37] centres of which 9 [9] were new. The staff gave 121 [195] demonstrations and trained 111 [242] persons. The progressive total of the centres visited by this section was 185 [176]. Dyes valued at Rs. 20 [Rs. 43] were used for free demonstration and the retail sale of dyes to dyers and printers amounted to Rs. 1,093 [Rs. 508]. Five [9] new dyeing and printing establishments were started and assistance was given to 13 [19] old ones. Besides this, all the dyeing required for the experimental weaving shed and for about 50 per cent of the dyed yarn used by the Central Provinces and Berar Weavers' Co-operative Society, Limited, Nagpur, for the manufacture of articles for Government and other outside orders was done by this staff.

(*d*) *Power-loom weaving.*—Power-loom weaving as a cottage or small scale industry made considerable progress during the year. The total number of power-loom factories in the province at the end of the year was 187 99 with 544 [356] looms. In one factory, a Jacquard is fitted with the help of Government power-loom teacher for weaving saree border designs. Burhanpur is the chief centre of this industry and most of the factories there consist of just a loom or two. The progress in the power-loom industry at Burhanpur is to a great extent due to the cheap supply of electrical energy and the obliging nature of the secretary of the electric supply company of the town. One power-loom teacher assisted by a mistry is stationed at Burhanpur and another power-loom teacher is stationed at Nagpur to render help to the power-loom weavers in their work. Owing to considerable increase in the number of power-looms at Burhanpur, the two departmental men stationed there find it difficult to cope with the increased work. Sunday classes to teach designing to power-loom weavers were opened at Burhanpur during the year.

(*e*) *Weavers' Co-operative Societies.*—The grant from the Government of India for the year under report was the same as last year, *i.e.*, Rs. 24,400. The Nagpur Weavers' Society, while acting as a central society for financing other societies, continued to weave varieties of new attractive patterns in sarees and paid special attention to weaving of dhoties and sarees of finer counts. Orders for cloth from Public Works Department, Forest, Excise and Settlement Departments and for cloth of special varieties such as curtains, bed-spreads, durries, etc., which were received by the textile section were transferred to and supplied by the society. Raw material such as cotton and silk yarn worth Rs. 25,840 [Rs. 48,990] was purchased by the Central Society during the year, of which material worth Rs. 13,661 [Rs. 22,718] was supplied to branch or affiliated societies and Textile Expert's office. The balance of material worth Rs. 25,000 [Rs. 26,272] was for the use of the Nagpur society. The approximate value of the manufactured cloth was Rs. 34,000 [Rs. 40,000] and the amount paid as wages to weavers for weaving was Rs. 8,400 [Rs. 10,965], besides Rs. 3,737 [Rs. 4,466] paid as wages for preparatory processes such as twisting, warping and dyeing of silk. Total sale of society's products amounted to Rs. 24,472 [Rs. 17,925]. Besides the Nagpur society, there were four other weavers' societies working during the year.

Two more societies were registered during the year and proposals of two other societies were under consideration. The working of all the weavers is directed by the staff of the textile section but the progress is much hampered by the apathy of public to shoulder responsibility for working such societies coupled with the fact that there is no staff to do the propaganda and supervision work.

(*f*) *Exhibitions.*—The textile branch participated in the All-India Industrial and Cultural Exhibition held at Nagpur and All-India Khadi and Village Industries Exhibition at Tripuri. Demonstrations in improved appliances and other activities of the textile section were also given in these exhibitions. Special varieties from hand spun yarn were woven for the exihibition at Tripuri and they were much appreciated by the public.

15. **Grant-in-aid to All-India Spinners' Association.**—The All-India Spinners' Association asked for Government assistance to a scheme formulated by it amounting to Rs. 23,760 for the encouragement of hand spinning and hand weaving in rural areas. Government approved of the scheme and sanctioned a grant-in-aid of Rs. 21,760 and a sum of Rs. 2,000 was provided by the Maharashtra Charkha Sangh, Wardha. Briefly, the scheme provided for the following items of expenditure :—

(1) Replacing old spinning wheels by scientifically made new ones and supplying wheels costing Re. 1-8-0 each to about 10,000 new spinners at a concessional rate of Re. 0-8-0.

(2) Supplying sets of carding bows each costing Re. 1 to about 3,200 spinners at a concessional rate of Re. 0-6-0.

(3) Engaging 40 workers to train the spinners in their art.

(4) Engaging two teachers to train the workers.

(5) Stipends to 40 pupils at Rs. 8 per mensem for a period of three months.

(6) Loss which will accrue in establishing and developing new production centres of khadi.

During the year, the Maharashtra Charkha Sangh incurred an expenditure of Rs. 10,000 out of the above grant. A further grant-in-aid of Rs. 5,000 was paid by Government on account of increase in the agents' commission for pushing on the sale of khadi, prices of which had gone up owing to increase in the wages of spinners.

16. **Dead Cattle Centres.**—A scheme for the training of village chamars in the use of offal and in skin flaying was introduced during the year as an experimental measure under the supervision of Mr. G. R. Valunjkar, Conductor, Gosewa Charmalaya, Nalwadi, Wardha. The scheme is divided in two parts: (i) disposal of dead carcasses in rural areas, and (ii) bone-meal propaganda. Two centres at Wardha and Yeotmal were opened for the disposal of carcasses where flaying and curing of hides, extraction of fat and manufacture of flesh manure and bone-meal are carried on. Bone-meal propaganda work was carried on in the four districts of Mandla, Balaghat, Wardha and Yeotmal. The results so far achieved appear to be promising. The scheme is being continued in the ensuing year.

A Dead Cattle Institute has been started at Nagpur in the buildings of the Government Leather Tanning School as an experimental measure for a period of one year under the supervision of Mr. Valunjkar, Supervisor, of the above scheme. As it was started late in the year, it is being continued in the ensuing year. The results so far achieved appear to be hopeful.

Some difficulty is being experienced by the centres in securing dead animals. The question of enacting a measure with a view to making it obligatory on the part of Kotwars to give information of dead animals to the working centres and on owners to dispose of carcasses to licensed flayers only is under consideration.

17. **Emporium for Products of Village Industries.**—The Emporium in the Central Museum, Nagpur, is replete with a variety of village industrial products. During the year under review, household wooden articles from Bhandara, loongis and rumals from Ellichpur, Bosky coating, newar and artificial wooden pulp flowers from Nagpur were acquired for sale and samples of sand-paper from Rawalpindi, paper-plup toys from Cuttuck, and samples of carpets from Ellichpur were received for exhibition. The Emporium is primarily intended to advertise and push the sale of the village industrial products by their exhibition at a central place where the manufacturers, dealers and customers can come together and derive mutual benefit. The sales during the year amounted to Rs. 192 [Rs. 470]. The Emporium took part in the following exhibitions:—

(1) All-India Industrial and Cultural Exhibition held during the Christmas 1938 at Nagpur.

(2) All-India Khadi and Village Industries Exhibition held at Tripuri during the Congress session in March 1939.

18. **Museum.**—The average daily number of visitors to the Central Museum during the year was 905 [910]. Five inscribed stones and one image of Varaha were removed from the Sub-Divisional Officer's bungalow at Damoh to the Museum as advised by the Archæological Department. The huge stone slab known as the "Pauni stone slab of Bhagadatta King of Bharas" has also been brought to the Museum. Twelve photographs of the Archæological sites near Jubbulpore have been acquired for the Museum from the Archæological Department. 21 Gold, 52 Silver, 18 Copper and 26 Bullion coins were added to the Coin Cabinet. The pre-historic galleries have been transferred to the newly constructed free-standing cases and the exhibits now include the famous Mohenjadara articles. A portion of the De-Terra Collections of the Nerbudda Valley Civilization has been received from the Indian Museum, Calcutta. The entire collections in the Ethnological, Arts and Crafts, Economic and Geological sections were re-arranged and re-labelled. The Geological collections have been enriched by the addition of specimens of manganese ore, a piece of quartz with beautiful dendrite markings and a sample of fossil wood, a sample of graphite and several samples of copper ores from the Sleemanabad mines. Plaster-casts of the fossil bones of Dinosaur discovered by Dr. Methlay at Jubbulpore have been displayed in the gallery. Additions to the Natural History Section comprise a collection of fishes from the Khindsi Tank. A leopard and a monkey from the Maharajbag menagerie and several new birds and reptiles have been mounted for exhibition in the galleries. Show cases exhibiting mimicry in insects and birds useful and destructive to agriculture have been renovated.

Batches of school children and college students were taken round the museum. A touring party of about 300 college students from Bombay organized by the Great Indian Peninsula Railway visited the Museum in October last. Among the distinguished visitors to the Museum, mention may be made of His Excellency the late Mr. H. Bomford, C.I.E., I.C.S., and Rao Bahadur K. N. Dixit, Director-General of Archæology in India.

19. **Museum Committee.**—An Advisory Committee consisting of four members with the Hon'ble Minister for Industries as Chairman was appointed for the management and future development of the Central Museum, Nagpur. It will tender advice on the following matters :—

(i) Acquisition, arrangement and care of exhibits.

(ii) Extension and repairs of the museum building.

(iii) Proposals for improving the qualifications of the staff of the Museum and for their periodical training.

(iv) Consideration of the suggestions of the public entered in the Suggestion Book.

(v) Proposals for the reorganization of the Museum.

COMMERCIAL AND INDUSTRIAL INTELLIGENCE

20. **Trade Statistics.**—During the cotton season 1937-38, the total arrivals of kapas including ginned cotton in the cotton markets of the province were 895,268 [1,041,120] cart-loads. The total number of bojas of cotton ginned in terms of 392 lb. each was 759,591 [998,376] whereas the number of bales pressed during the same period was 753,792 [901,762].

21. **Organized Industries.**—The following brief account of the state of the important organized industries in the province is based on the reports received from the industries concerned. The textile industry of the province suffered a set-back in trade conditions enjoyed by the industry during the last year. This was chiefly due to very low off-take of manufactured goods during the year under review. During the first half of the year, however, the demand for manufactured goods was steady owing to Sino-Japanese War, but afterwards as a result of general decline in the export trade and poor demand from the consuming centres, the textile market was practically dull. The condition of the oil industry was on the whole good. The oil-mills in the province have begun to manufacture genuine double boiled linseed oil, genuine pale boiled linseed oil, varnishes and disinfectants. All these products were formerly imported from Bombay and Calcutta. The condition of the glass factories continues the same as in the previous year. The cement and the asbestos

cement industries have been progressing fairly satisfactorily. The condition of the match industry is worsening year after year. The three existing match factories were working only intermittently. Unless and until some protection is given to them against severe competition from the foreign-owned Indian match factories, the future of the industry threatens to be dark. 327,077 [620,703] tons of manganese ore were exported from the province during the ten months (1st April 1938 to 31st January 1939) for which the figures are now available. This shows a considerable fall in the export. The demand for the Central Provinces coal was fairly good, the raisings and despatches during the calendar year being 1,658,023 [152,896] and 1,538,236 [1,424,960] tons, respectively. There has been no improvement in the shellac industry. The bidi industry continued to do well. The pharmaceutical drug industry has to face keen competition and still finds it difficult to hold its own against the internal and external competitors in the field.

22. **Commercial and Industrial Enquiries.**—The number of commercial and industrial enquiries dealt with in this section during the period was 237 [238]. They may be classed under four main heads, namely,

(1) requests for names and addresses of industrial concerns manufacturing or dealing in particular goods in and outside the province;

(2) enquiries regarding the sources of supply of various kinds of articles;

(3) requests from firms to bring their goods to the notice of consumers and distributing agents; and

(4) miscellaneous enquiries.

In order to illustrate the wide range of references received, it may be mentioned that they included enquiries regarding bamboos, electric fittings, tanning, sporting requisites, collieries, cotton waste, yarn waste, oil-mills, aloe fibre, citrus fruits, catechu, small machinery, hand power rice hulling and polishing machines, hand-made paper, enamel wares, small industries subsidiary to electric power, rubber factories, pig hair, power crushers, etc. Particulars of new industries established in other provinces were also brought to the notice of commercial concerns in the province. The number of enquiries indicate that the services of this branch are being appreciated by the public.

23. **Help and Advice given to Private Industrialists.**—Some of the numerous cases in which help, advice and interviews were given to private firms and industrialists and Government departments and which have not been included in the preceding paragraph are mentioned below :—

Mr. Chatturbhujbhai Jasani, M.L.A., Gondia, was supplied with the following technical notes :—

(1) Manufacture of sealing wax.
(2) Manufacture of artificial silk.
(3) Manufacture of glass bangles.
(4) Manufacture of silver and gold thread.
(5) Manufacture of buttons.
(6) Manufacture of typewriter ribbons.
(7) A technical note on raw materials for paper manufacture and also certain statistics regarding paper industry.
(8) A note on cultivation of sugarcane and manufacture of sugar therefrom.

Information regarding starting of an oil-mill with ghanis was supplied to Mr. Patni of Chhindwara.

A technical note on the manufacture of one and four gallon tin cans was supplied to Mr. Kamtaprasad, Raipur.

Two notes dealing with (i) the method of making mustard oil pungent and (ii) extraction of groundnut oil were supplied to Messrs. Munnilal Bapulal Oil and Flour Mills, Jubbulpore.

A note on the utilization of waste lime was supplied to the Manager, Diwan Lime Company, Post Office Diwan Siding, *via* Jukehi.

Information regarding availability of wood suitable for the manufacture of umbrella sticks was supplied to Mr. K. V. Paturkar, Nagpur.

A note on the bucket manufacture was supplied to the Dhantoli Vyapari Mandal, Nagpur.

Messrs. Poonawala and Sons, Yeotmal, were supplied with a note on the manufacture of sugar-candy.

Information regarding chalk stick making was supplied to Mr. L. K. Kedari, Raipur.

Information with regard to institutions imparting training in laundry and washing was supplied to Mr. Kaotley, Warud.

Messrs. Kishorilal Loomba and Company, Narsinghpur, were supplied with information regarding lorries run by charcoal gas.

Information with regard to polishing and import of marble was supplied to Lakshman Singh Chawhan, Pleader, Jubbulpore.

The Yeotmal Electric Supply Company, Yeotmal, was supplied with information with regard to the possibility of establishing an oil crushing mill in the province.

The Director of Industrial Research Bureau, New Delhi, was supplied with information regarding production, export and import of mahua seeds.

Information regarding disposal of blood in slaughter-houses was supplied to K. S. Abdul Rahman Khan, M.L.A., Khamgaon.

LABOUR

24. **Indian Trade Unions Act, 1926.**—Nine new trade unions were registered and the certificate of one union was cancelled as it ceased to exist during the year. The number of unions on the register stood at 36 [28].

25. **Trade Disputes Act, 1929.**—No regular application was received for the appointment of a Board of Conciliation or a Court of Inquiry, under section 3 of the Trade Disputes Act, although a number of requests were made for the same.

26. **Industrial Disputes.**—Ten strikes occurred in textile mills and a few in bidi and other factories. The strikes in the mills at Nagpur were amicably settled by Government intervention. The grimmest and most long drawn out strikes of the year occurred simultaneously at the Hinganghat mills. They began on 30th June 1938 and ended through Governmental intervention on 1st October 1938. About 3,000 persons were involved and the total working days lost would approximate to 225,000 days. Most of the other strikes were stay-in-strikes. The cause of the strikes was mostly decreased or low wages with which departmental grievances were not infrequently linked up.

27. **Central Provinces and Berar Textile Labour Enquiry Committee.**—In view of the labour unrest consequent on the publication of Interim Report of the Textile Labour Enquiry Committee of Bombay, the Central Provinces and Berar Textile Labour Enquiry Committee was

appointed to examine the question of restoration of wage-cut in the cotton textile mills in the province. After careful consideration of the recommendations of the Committee, the Government published a Resolution on 16th June 1938 favouring the restoration of the actual wage-cut by 60 per cent in the case of old employees and the grant of 60 per cent of the difference between the old and new rates in the case of new employees. Schedules of wage increase to suit individual mills and flat rates for Hinganghat mills were worked out by the Department. As a result of these measures, cotton textile workers have gained about three lakhs of rupees annually. Mr. (now Rai Saheb) P. K. Sen, Inspector of Factories, was appointed as Secretary of the Central Provinces and Berar Sweepers' Enquiry Committee.

28. **Cotton Ginning and Pressing Factory Pools Committee.**—Complaints having been received by Government from time to time to the effect that owing to the formation of pools, cotton ginning and pressing rates were pushed unduly high to the detriment of cotton growers who are already hit hard by the slump in prices, the Provincial Government appointed a Committee composed of Director of Industries as Chairman, with four non-official members and Mr. V. R. Rege, Inspector of Factories, Central Provinces and Berar, as Secretary to the Committee. Several meetings of the Committee were held at different cotton centres in the province in which several non-officials interested in the matter were examined and a detailed report was submitted. Government has approved of the recommendations and has accordingly introduced a Bill to regulate the rates by appointing a rate fixing committee which will prescribe the maxima rates for ginning and pressing of cotton to protect the interests of cotton growers.

29. **Cost of Living Index Numbers.**—The average cost of living index number for industrial workers for the year with January 1927 as the base (100) was 61 [63] at Nagpur and 57 [61] at Jubbulpore while with July 1914 as the base (100) it was 86 [90] at Nagpur and 89 [96] at Jubbulpore. Thus the average cost of living for the year taking January 1927 as the base, fell by 2 points at Nagpur and 4 points at Jubbulpore. The monthly index numbers of these two towns are published in the *Central Provinces and Berar Gazette*.

MISCELLANEOUS

30. **Conference of Ministers and Directors of Industries.**—The tenth Industries Conference was held at Bombay on the 23rd and 24th January 1939. The Hon'ble the Minister was unable to attend but my predecessor, Mr. C. C. Desai, and the Textile Expert to Government attended the conference and also the fifth meeting of the Imperial Sericultural Committee.

31. **Industrial Research Council.**—The fourth session of the Industrial Research Council which was held at Madras on the 8th and 9th August 1938 was also attended by my predecessor, Mr. C. C. Desai.

32. **Joint Lac Conference.**—The Hon'ble the Minister for Industries and the Director of Industries visited Ranchi to attend a Joint Conference of Ministers of Industries, United Provinces, Bihar and the Central Provinces and Berar, to consider ways and means to rehabilitate the lac industry. As a result of the deliberations, a Joint Lac Control Board to deal with all problems connected with the lac industry and a Committee to draw up the necessary details have been established. Government has nominated—

(i) Mr. Sukhdeo Agarwal to represent shellac manufacturers on the Joint Board, and

(ii) Mr. K. P. Pande, M.L.A., Sihora, Jubbulpore, to represent lac growers both on the Joint Board and on the Committee.

A bill to provide for better regulation of the purchase, sale, manufacture and marketing of lac is under consideration of Government.

33. **The Central Provinces and Berar State Aid to Industries Act, 1933.**—A grant of a loan of Rs. 15,000 was sanctioned by Government to the Central Potteries, Limited, Nagpur, for discharging a portion of the existing high rated debts of the company and for the purchase of machinery for starting the manufacture of porcelain and sanitary ware departments on certain conditions.

The following concerns and individuals have submitted regular applications for State aid under the State Aid to Industries Act, 1933:—

(1) *All-India Village Industries Association.*—Application for free supply of wood for 100 oil ghanis of improved type for distribution

amongst village Telis at cost price. The application has been forwarded to Government for sanction.

(2) *Baliram Kisan Sawarkar, Arvi.*—Application for a loan of Rs. 300 for starting tanning industry, which is under consideration.

(3) *Amrit Match Factory, Bilaspur.*—The factory has applied for reduction in the rate of royalty on match wood. The case is under consideration.

34. **Industrial Survey.**—A committee consisting of 12 members under the chairmanship of Mr. J. C. Kumarappa was appointed by Government to carry out industrial survey of the province. The inaugural meeting of the Committee was held on the 16th January 1939. The meeting was attended by the Hon'ble Ministers, Mrs. Kale, Deputy Speaker, Secretaries to Government, Heads of Departments, Principals and Professors of Colleges and a number of prominent non-official gentlemen. The Committee adopted several resolutions; the principal ones related to the allotment of districts, sub-divisions and special areas to group leaders and the issuing of a questionnaire regarding village surveys. The questionnaire was issued by the Committee and the group leader started field work from the 23rd January 1939. The survey work lasted for about 15 days. In all 606 villages with a total population of over 15 lakhs were surveyed. The Committee has published its preliminary Report. Far-reaching recommendations have been made in regard to the help that the Government should render to over 30 cottage industries in the province.

35. **Conclusion.**—It is clear from the above report that the activities of the Department are expanding considerably in all branches and that the staff had to work very hard to cope with the increased work. It is evident that the Department of Industries is now receiving the attention it deserves and that it will soon be one of the most important Departments of Government.

D. V. REGE,

Director of Industries,

Central Provinces and Berar.

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